

orotidine-5'-phosphate decarboxylase and the second inactive reporter is a C-terminal portion of orotidine-5'-phosphate decarboxylase.



### REMARKS

According to 37 CFR § 1.115 (a), a preliminary amendment may be made to a patent application before the mail date of the first Office action from the PTO. Because a first Office action has not yet been received from the PTO, and because the nature of the changes contained in the present preliminary amendment would require no additional effort on behalf of the PTO to conduct prior art searches, applicants submit that the changes contained herein do not unduly interfere with the preparation of a first Office action, and should therefore be entered.

All claims are supported in the specification. First, claims 1-25 generally relate to the detection of interactions between test agents employing fusion constructs containing N-intein and C-intein. On page 12, 2nd full paragraph, the specification states that "[t]he present invention utilizes the trans-splicing capability of inteins to provide a method for detecting interactions between test agents such as proteins." The rest of the paragraph on page 12 describes the basic construct of the methods described in claims 1-25. Claims 26-35 relate to the detection of protein-protein interaction using prey fusion protein expression libraries with the N-intein and C-intein cellular mechanisms. On page 35, the beginning of the second paragraph states: "The method of the present invention for detecting protein-protein interactions can also be used to screen an expression library..." The same paragraph, which continues over to page 36, describes an embodiment of the expression library for N-intein (Claim 26), while the next paragraph on page 36 describes the use of a C-intein fusion library (Claim 31). Claims 36-59 are directed to the selection of compounds capable of modulating interactions between interacting test agents. On page 41, first full paragraph, the specification states: "In accordance with another aspect of the present invention, a method is also provided for selecting a compound capable of modulating an interaction between interacting test agents including proteins."

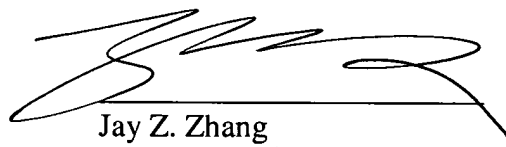
Thus, the claims relate to either detecting the interaction (claims 1-35) or selecting compounds capable of modulating the interaction (claims 36-59) of a variety of proteins. For example, interactions may occur "between extracellular proteins, between a secreted protein and the extracellular portion of a cell surface protein, between membrane

proteins, and between the intracellular portion of a membrane protein and a cytosolic protein” (page 38, second full paragraph). Accordingly, the specification provides support for either detecting interactions, or selecting compounds capable of modulating the interactions, among such variety of proteins.

In view of the foregoing, applicants submit that this application is in condition for allowance and notice of such allowance is earnestly solicited.

Respectfully submitted,

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## APPENDIX

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In reference to the amendment made herein to the title, deletions appear as double strikethrough text, as indicated below:

In the title:

METHOD OF DETECTING ~~EXTRACELLULAR~~ PROTEIN-PROTEIN  
INTERACTIONS